# Delaware and the Regional Greenhouse Gas Initiative (RGGI)

## 1. What is the Regional Greenhouse Gas Initiative (RGGI)?

RGGI is a competitive market based carbon dioxide ($CO_2$) emissions trading program that reduces carbon emissions from large coal and other fossil fuel fired electric generating units (units producing more than 25 Megawatts of electricity) in Delaware and eight other states (Connecticut, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island and Vermont). These large polluting power plants are required by each Participating State's regulations to hold and surrender one RGGI $CO_2$ allowance for every ton of $CO_2$ they emit into the atmosphere. The Participating State's make allowances available to generators through a transparent, robust and heavily monitored auction process. The proceeds from those auctions are returned to ratepayers in each state through investments in energy efficiency and other clean energy programs.

## 2. What is the RGGI 2012 Program Review?

As called for in the original RGGI agreement, the Participating States conducted a periodic program review of the $CO_2$ Budget Trading Program. Program review was conducted to ensure that the trading program remains congruent with current market conditions and electricity generating landscape. Proposed amendments to the program have been incorporated in an Updated Model Rule that guides each state as they update their state specific RGGI regulations.

The RGGI program review was a rigorous and comprehensive evaluation, supported by an extensive regional stakeholder process that engaged the regulated community, environmental nonprofits, consumer and industry advocates, and other interested stakeholders. The Participating States worked with program review stakeholders beginning in 2010, convening over 12 stakeholder meetings, webinars and learning sessions. The program review sought to ensure RGGI's continued success – effectively reducing CO2 emissions while providing benefits to consumers and the region.

As part of the comprehensive evaluation, the Participating States hired expert energy/electricity modelers (ICF International http://www.icfi.com/) to undertake targeted modeling to understand potential ways the market may react to changes in the program. The modeling assessed a variety of scenarios including changes in emissions (i.e. resource shifting from coal fired generation to natural gas), future generation unit shut downs and the installation of new units, electricity consumption, energy efficiency investments, and economic conditions, to name a few. The modeling results and process provided the Participating States guidance on policy decisions. The ultimate goal remains to facilitate a successful, competitive carbon emission trading program throughout the RGGI Region. For additional information on the modeling that was used in the 2012 Program Review please visit (http://rggi.org/design/program_review/materials-by-topic/modeling)

The key updates from the 2012 Program Review include a reduction in the regional allowance cap as well as additional market flexibility mechanisms to protect against significant price fluctuations in the market. The regional allowance cap beginning in 2014 will be equal to 91 million tons — a reduction of

45% from the previous cap. The reduction in the regional cap reflects current emission levels throughout the RGGI states. The reduction in the regional cap will better facilitate a competitive carbon market.

Potential increases to the price of electricity as a result of the adjustment to the regional cap were a concern to the Participating States as well as generators throughout the region. In order to protect against price spikes and fluctuations, the Participating States along with stakeholders developed a market flexibility mechanism called a Cost Containment Reserve (CCR). The CCR would consist of a fixed quantity of allowances, in addition to the cap, that would be held in reserve, and are only to be made available for sale if allowance prices were to exceed predefined price levels.

The Participating States based their recommendations regarding the cap level, the size and structure of the CCR, and the CCR price triggers upon consideration of relevant information and analyses, including but not limited to:

- Retrospective analyses of $CO_2$ emissions trends;
- Electricity sector and $CO_2$ emissions modeling;
- Macroeconomic modeling;
- Customer electricity bills analyses; and
- Stakeholder engagement and comments.

## 3. How does RGGI impact my monthly bill?

History has indicated that residents and businesses will see no discernible change in their bill as a result of the program. While a small price increase in wholesale electric rates might be expected, what we've actually seen is a slight reduction in consumers bills, as predicted in recent modeling exercises conducted as part of the most recent program review process. These savings are attributed to the reinvestment of RGGI auction proceeds into energy efficiency measures in the Participating States. Programs recently conducted in Delaware include the Home Performance Program with Energy Star Program, the appliance rebate program and the Green for Green program among others. Even without the investment of energy efficiency programs in individual homes, for the average Delaware household, the cost of RGGI would be more than offset by installing just a single CFL light bulb.[1]

[1] The Department of Energy estimates that installing a single compact fluorescent (CFL) light bulb saves about $70-80 over the lifetime of the bulb, which translates to $5 to $10 per year (According to the US Department of Energy's Energy Star Savings Calculator, available at http://www.energystar.gov/ia/business/bulk_purchasing/bpsavings_calc/CalculatorCFLs.xls).

## 4. Have RGGI funds saved Delawareans money, created jobs, or improved the environment?

Yes, Delaware has received over $38 million in proceeds from RGGI – revenues that have been directed to Delawareans, local governments, businesses, non-profits and others across a wide spectrum of energy efficiency and clean energy investments. RGGI funds provide the critical "start-up" resources to build the infrastructure for Delaware's clean energy economy. RGGI funds have been essential to design, market, and implement innovate new programs across the state that save money and create jobs. RGGI proceeds have allowed the state of Delaware to leverage funds and funding sources for community reinvestment projects and other large-scale energy efficiency projects. Some of the programs that RGGI has funded are:

**Delaware Sustainable Energy Utility (SEU)** – The SEU receives 65 percent of the RGGI auction proceeds and uses those resources for programs under its purview. Thousands of Delawareans have benefited from the SEU's appliance rebate programs, Home Performance with Energy Star Program, the Green for Green program, and others – many using RGGI funds. A complete listing of their programs can be found at www.energizedelaware.org

In 2012, the SEU provided funding to local poultry growers to replace their existing lighting with higher efficiency LED lighting. The bulbs that were used in this program were specifically designed for the poultry industry (dimmable, shatter-proof plastic, etc.). The LED bulbs implemented in this program save 50-75% compared to traditional incandescent bulbs. The SEU sponsored the purchase of 5000 LED light bulbs which save approximately 179 kWh per bulb. Once installed, these bulbs will save Delaware poultry growers up to 890,000 kWh per year.

**Low-Income Delawareans** – By statute, 15 percent of RGGI revenues have been directed to low income Delawareans resulting in over $3 million directed towards weatherization and high heating bill assistance. Using Department of Energy statistics[2], we estimate that each participant in the Weatherization program in Delaware is saving $415 in energy costs annually while also reducing emissions to our air. Weatherization is a highly cost-effective investment: for every $1 invested in the program, WAP returns an estimated $2.50 to the household and society. The proceeds from RGGI provide funding for the Low Income Heating Assistance Program which has assisted more than 2000 families with their heating bills. This support is particularly crucial since low-income households spend over 14% of their total annual income on energy costs.

**Greenhouse Gas Emission Reductions** – In Delaware, 10 percent of RGGI revenues are used for reductions in greenhouse gases across the state through a competitive grant program open to all applicants. An advisory committee made recommendations to DNREC, resulting in the awarding of grants to 30 projects across the state ($1.2 million total).[3] These projects have resulted in the direct

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[2] For more information, see DOE's website: http://www.waptac.org/WAP-Basics.aspx

[3] A full list of projects and recipients is available on our web site at: http://www.dnrec.delaware.gov/energy/services/Pages/DelawareGreenhouseGasReductionProjects.aspx.

reduction of more than 26,000 metric tons of carbon dioxide annually, which is equivalent to taking 5,000 cars off the road and is the equivalent of emissions from powering 3,000 homes for one year.

This year, DNREC is planning to launch an innovative transportation grant program. This grant program will facilitate the deployment of alternatively fueled vehicles and infrastructure. The alternatively fueled vehicles include electric, natural gas and propane just to name a few. Please continue to check the Delaware Division of Energy and Climate website for details about the launch of the program.

**RGGI Administration** – The remaining 10 percent of RGGI funds pay for DNREC staff working on RGGI, as well as other climate and energy related efforts. The benefit of RGGI is that the program funds itself, without any subsidies or appropriations from the State's General Fund.